SF 907
.W35
Copy 1

How to Shoe a Horse

OR

TWENTY-FIVE YEARS' PRACTICAL EXPERIENCE IN HORSESHOEING AND TREATING OF LAME HORSES.

A Treatise

ON THE SHOEING AND TREATMENT OF DISEASED FEET, WITH THEIR CARE, AND GIVING SOME OF THE BEST REMEDIES IN USE FOR MAN OR BEAST.

BY J. E. WATTS,
VETERINARY HORSESHOER,
1020 NORTH KANSAS AVE., TOPEKA, KAS.

PRICE, ONE DOLLAR.

I. W. PACK PRINTING Co., 115 East 7th St. Topeka, Kansas.

SHOUT
SHARE
IT

How to Shoe a Horse,

OR

TWENTY-FIVE YEARS' PRACTICAL EXPERIENCE IN HORSESHOEING AND TREATING OF LAME HORSES.

A Treatise

ON THE SHOEING AND TREATMENT OF DISEASED FEET WITH THEIR CARE, AND GIVING SOME OF THE BEST REMEDIES IN USE FOR MAN OR BEAST.

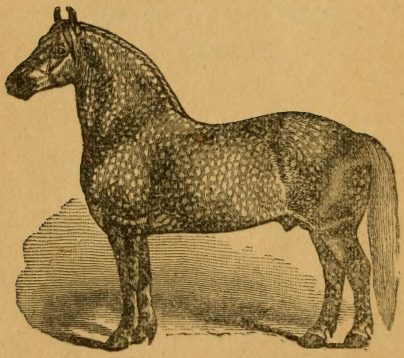
LIBRARY OF CONGRESS COPYRIGHT JAN 14 1890 365 07 WASHINGTON

Copyrighted 1889

BY J. E. WATTS,
VETERINARY HORSESHOER,
1020 NORTH KANSAS AVE., TOPEKA, KANSAS.

Printed by the I. W. PACK PRINTING CO., 115 S. 7th St., Topeka, Kansas.

SF 907
.W35



Errata.

Page 9, 15th line from top read "salt," instead of "salts."

Page 9, 9th line from the bottom, read "will not bed," instead of "will bed."

Page 11, last line, read "navicular."

Page 25, 2nd line under head of "Seedy Toe," read "burning" instead of "burying."

Page 32, read 1st head "Navicular."

Page 32, read second head "Gravel," not "Garvel."

Author's Preface.

The object of the writer in bringing this work before the public is to treat on a subject that may be termed a new departure. Having had twenty-five years experience in practical horse shoeing, and having made a specialty of the treating and shoeing of horses that had become lame from improper shoeing and treatment of that noble animal and best friend of man, and having had unparalelled success in the cure of the many different diseases of the feet, and knowing the evils arising from improper shoeing and management of horses, the author brings this little book to the notice of owners and managers of horses, as well as the horseshoers of this country with a three-fold purpose in view: (1) To alleviate the sufferings of the horse caused by ignorance or carelessness, or both; (2) That all persons who may own or have the care of horses may have a proper understanding of how a horse should be shod, also, how

their feet may be properly cured of diseases arising from accident or shoeing; (3) That all blacksmiths, and especially those who shoe horses may know how to shoe horses according to scientific principles, and have a guide in the experience of one who has made the subject a life study that they may learn how to prevent lameness in the feet as well as cure it.

If this little book will do this the author will feel as though his efforts have not been altogether wasted. As it is the intention to do good to his fellow man, as well as to the horse, rather than to the making of money, he places the price within the reach of all. "With malice toward none, but charity for all,"

I remain, Yours Truly;

J. B. WATTS,

Veterinary Horseshoer.

FRATERNITY.

There should be a fraternal organization of horseshoers and blacksmiths for the purpose of establishing a more friendly feeling within the Craft; as well to benefit each other in business. They should meet together at stated times and consult regarding the best methods of doing work, regulate the prices of different classes of work and to keep each other posted as regards frauds and deadbeats both in and out of the trade. I think such an organization would be better than a union. I mean a society that will take in all the Craft, whether a proprietor or helper, so he is of good moral habits and conforms to the rules of the society. I have long thought that there ought to be something of this kind. If such a society was organized there would not be so much animosity existing between the members of the Craft. I know plenty of smiths who have the bighead so bad that they think no one knows anything but themselves, and that no person should pretend to work in a town but themselves; I have in my mind's eye now more than one person who is "built" just that way.

I have had it said to me that I must have a vast

amount of cheek to set up a shop in Topeka among so many shops and good workmen. One went so far as to say that I did not know how to shoe a horse for a city or pavement, when he never worked in a city or for any pavement except black mud.

Now, I say, give every man a fair show. It does not make any difference where they are from, as long as they are just and honorable. Let us try to cultivate a more fraternal spirit, whether we form a society or not; the horseshoer should be a man in every sense of the word and he should feel as though there was a great responsibility resting upon him when he is engaged in horseshoeing, because he may by either ignorance of the structure of the horse's foot, or a little carelessness cause the unfortunate animal a great deal of suffering, while it would injure the owner as well. Think about this, fellow Craftsmen, and let us study to elevate the standing of our occupation both as a business and in the eyes of the public.

The Structure of the Hoof.

The external or covering of the foot should be divided into four parts, viz: the wall or crust, sometimes called the shell of the foot, the sole, bars, and horny, or insensible frog; the external parts act as a protection to the internal or sensitive portions of the foot, it is porous, or filled with hollow tubes in such a manner as to preserve each canal distinct. These canals carry off the excrementions or waste matter of the hoof, and in them are found the vessels by which the same are secreted.

The small vessels in the vascular and nervous membrane, beneath the hoof is a continuation of the true skin entering into the canals; also these small vessels

possess the properties of sensibility and conductors; they have functions to perform which in the healthy state nothing else can perform without injury to the other parts. The bars are the continuation of the wall or crust forming an angle at the heels and ending in front of the frog near the toe. They give strength and durability to the foot, prevents contraction at the heels and protect the sensitive parts of the hoof. As long as the walls and bars are left in their natural condition the foot will be preserved in their natural form.

The sole is more elastic than the wall and is the medium of the sensitive parts through which the powers of elasticity, the percussion or concussion of the feet on the ground is regulated. The horny frog is more elastic than either of the other parts, and is intended to take the jar off the foot and legs of the horse and should never be pared with the knife in the least. On the inside of the wall or crust will be found a set of leaves or lamina, resembling the under part of a mush room; they number about five hundred, which fits a similar number found in coffin bone. Each lamina has two sides on edge, making about three thousand articulations and representing a surface of four square feet, giving the body of the horse sixteen square feet, within the hoofs, to rest upon. The hoof is to protect the sensitive parts within. It may be rendered hard or soft by proper treatment, its form may be altered for better or worse, by shoeing, or by proper, or improper attention in the stable.

Horseshoeing a Necessary Evil.

The horse in a wild state never needs any shoeing or protection to the foot, except what God gave him he can run over all kinds of ground and never get lame

Who ever heard of a colt having contracted feet, corns or quarter cracks? Take a colt that has never been used and he has a wide, sound foot, the heels are wide and open; the foot is widest at the quarter, if you take a rule and measure it, you will generally find it wider at the quarter than it is long. The frog is wide and spongy, and comes well down on the ground for the protection of the feet, acting as a cushion against the jar of the foot and legs, giving the horse a springy easy motion.

Now after a few years service, or through improper care by man you will find the heels drawn in and under the foot narrow and long, or, in other words, contracted. The animal has lost that easy motion and goes blundering along as if his legs had been broken, then the trouble is laid to everything else except the shoeing.

Shoeing is an evil because it is an injury to shoe a horse; a necessary evil because the manner in which he is treated by some men would soon reduce him to no feet at all if he were not shod. I will say, though, that I have personal knowledge of horses, in Topeka, that are driven winter and summer over the different kinds of pavements, unshod on their hind feet, and they seem to be all right.

It is the rough roads and hard pavements that the horse is constantly working on, the standing on dry plank floors which absorbs all the moisture of the foot, and then if it is not shod properly will soon become so lame that the horse can hardly use it.

Care of the Feet.

The feet should receive constant attention, to keep them in good condition; every horse owner should have a trough or tub to bathe the animal's feet in, and should give them a good bath everyday. If the feet are sound that will keep them in good condition, but in case they become hard it will be well to poultice them with either a flax seed or bran poultice. To make the latter take a bucket of water, put in some wood ashes and let it sit until the water begins to feel slick to the hand, then pour in some bran and your poultice is completed. If the foot is much fevered it will take two or three applications to accomplish your object. The mud bath I also recommend: take good clean clay and thin it with water, add a double handful of salts, this will take the fever out of the foot and make them grow fast. Never have a horse shod if his feet are very hard if you can help it, but get them in good condition first.

To Shoe a Horse Properly.

The shoe for the front foot should, as a rule, be a wide web shoe, and large enough to follow the foot around to the heels and extending a little back, so that when the foot grows will bed in the heels. The foot should be dressed as near as nature intended it to be as possible. Do not cut away the heels too much, the frog should not be cut at all, nor the bars more than sufficient to level the foot; open the heels between the bars and the frog, cut them well down if grown together. Take no more of the sole than the dead crust, fit your shoe so it will lay flush all around the foot and cover the heel and bars, extending only a short distance back of the

heels; make the shoe level before you fit it on. Have the shoe for any kind of a foot beveled slightly at the heels from the nail holes outward; in the case of a flat foot the shoe may be concaved a little. Cool the shoe before trying it on, enough so it will not burn the foot, have the holes small enough so the nails will fit in tight, do not let the bearing be heavy on the heels; let the shoe be perfectly level and then level the foot with the knife and rasp; leave at least a half-inch of the sole even with the outside wall so that it will recieve a part of the bearing of the shoe; do not use large nails as they only injure the foot Do not drive the nails very high. except in a bad foot where it is impossible to get a good hold without. Have the heels in the web of the shoe broad enough so that they will cover the heels and bars, they should extend over the foot from the quarters back to the heels. Let the shoe be flush with the foot all around; when so fitted then will be but little filing to be done, too much filing will spoil the enamel of the hoof.

If shoeing for contracted feet bevel the heels of the shoe out considerably; when you are resetting a shoe cut all the clinches before pulling the shoe, because of the danger of injury to the foot. I once saw a man take a pair of pinchers and wrench on a shoe and burst the foot open and loose from the wall of the hoof about two inches. I never would allow any man do that kind of business in my shop. After the shoes are taken off pare down the growth of the foot and as you will generally find the toe needs the most, always take off all that is needed from the bottom, so there will be none to be cut off on the outside. If a fitter cannot fit a shoe so it can be put on without filing off a lot of the hoof, he is

not much of a fitter. Always bear in mind that a good sh er will always save the foot and keep it in its natural shape, save the heels, bars and frog, and remember that no frog, no foot; no foot, no hor e.

The way horses are usually shod by the average horse-shoer, the shoe is gen rally one size to short, and to make a better profit, the smith uses altogeth r a hind shoe, which is a narrow web shoe, and weighs less than a front or wide web shoe, and to make it have the appearance of being long enough will bring it straight back from the quarters, instead of following the rim of the foot around to the heels as he should do, thereby cutting across the quarters or wall of the hoof and preventing the foot from having the action that nature intended, and that is the expansion at the heels to keep it from contracting. But the shoe cuts down in the quarters and being usually beveled in at the heels, or, concaved all the way back, soon contracts the heels and quarters and by hurting the foot and causing it to fever and getting dry is the cause of corns, quarter crack and contracted foot. Besides, the shoes will be beveled in at the heel so that the shoe will keep crowding at that point; such shoeing as that will in a short time ruin the best foot on any horse. It prevents the natural action of the heels, which is to expand; the shoe soon buries down in the quarter and will cause the horse to go lame in a short time, or to favor his foot when standing The foot is soon dry, hard and feverish.

Another way is to cut away the heels and leave the toe, and throw the weight back on the h els, resulting in straining the tendons and the coffin joint, a good way to cause ricular disease. Another com-

mon practice is to fit the foot to the shoe, instead of the shoe to the foot; because the fitter cannot fit the foot, and because it is easier and quicker done. Then the practice of cutting away the frog and bars and also setting the shoe back and cutting and filing the toe off, and rasping almost, if not quite to the hair to make it look nice. Shoeing of that kind will take the eye of the average man and they will say it is a fine job. I want to say right here, that the most of the blame for poor shoeing is with the owners as they either dictate to the smith and say: "I want it done just so," and not knowing anything about it will look at the outside finish and if the hoof is rasped up to the hair it is a good job.

Sometimes you will see a man pick up the foot and the first thing he does is to trim the frog or cut and carve on it, because it is easy to cut, then cut out the bars and cut away the heels to make the foot look long and narrow, then heat a shoe and burn it level, only because he either cannot level a shoe without, or, he does it to make the foot soft so he can cut it easy, careing nothing about the feelings of the horse, or the injury he does, or else it is ignorance. It makes no difference which, no such man should be allowed to shoe a horse. Then some will take a shoe and fit it tight on the heels and toe leaving a space under it at the sides of the foot, drawing it down with large nails to make it stay on, which it will do to the injury of the foot, binding the heels and causing corns, or make the corns fester, giving the horse great pain. But the majority of horse owners think that is a first class job because the shoes stay on until worn out. You will see some set their shoe back from the toe and then rasp it down and up to the

hair, almost, and of course that is a first-class job, because of the fine finish on the outside of the foot. Now what in the name of common sense was the foot put on a horse for? Only for some ignoramus to learn to use a knife and rasp on?

It is only a short time until your horse is beginning to favor his feet by pointing them one at a time out in front of him to relieve the soreness of the foot, and also of the tendons that become inflamed and contracted. Yet in driving he may not show any lameness for a long time, but when he does then the disease is so far advanced that it will be some time before the best smith or veterinary can make any show toward curing or relieveing the animal, but if you will take the horse as soon as you find that he is favoring the foot by resting it in front of him, to the best shoer in the place, one that is known to the public as a veterinary horse-shoer, and who can give the best reasons for his theory as a shoer, and besides a man who can tell you about your horses' actions, just as well as you can yourself, that is the kind of a man to employ to shoe or treat your horse, and not one who has put the most of his time in prepairing a set of shoes to be put up as a show, when, as a rule, he does not know as much about a horse's foot as a hog does about war. Never allow any man to shoe a horse that will fit with a hot shoe, or one that will pare away the frog, because every time a knife is cut in to the frog it just injures the foot to that extent, and burning is only done because the smith either cannot fit a shoe without, or he does not care for the foot, so he can get the work done the quickest way possible without regard o the feelings of the horse or the injury he is doing the owner.

An other way of doing is to fit the shoe so it will rest on the heels and at the toe and the balance of the shoe does not touch the foot by from one eigth to one-fourth of an inch, and then take large nails and draw the shoe tight down on the foot to make it stay on which it surely will do, to the injury of the foot. But as the majority of horse owners do not care for anything except the shoe staying on until worn out, that would be considered a first-class job. Another wrong is to pare the heels and frog down and then set the shoe back about half an inch and then cut the shell or wall of the hoof all away at the toe with a toe knife, and then rasp it down smooth almost to the hair and make it look nice. But what does it matter with the owner or driver so it looks well on the outside? that makes it a good job; now what in the name of common sense was the wall or crust put on the foot for if not for protection. Then why not fit the shoe to the wall, or crust of the foot, after first dressing the foot down in a proper manner by saving the heels, frog and bars, taking the toe down to its proper level as any good judge could see at a glance, not allowing the bearing to be hard on the heels. The back part of the shoes from the last nail beveled outward, and not more than six or seven nails, not large ones, the largest horse need not have larger than No. 7; if the holes are not too large for the nails, and if the nails fit the holes, the shoe will stay on long enough with small nails. The author has shod a horse weighing 1900 pounds with No. 7 nails and used No. 5 and 6 nails on No. 4 and 5 shoes and the shoes seemed to hold all right. Some smiths, and the majority of horse owners, seem to think that the larger the nail the better, but I say the smaller nail will hold better than the large, because it

does not split the hoof so much. While in Illinois a man, a farmer, came to my shop and asked how large nails I used and I told him I had from 5's to 8's and he still wanted larger and cursed the smiths because they do not use larger nails. I told him I would not use nails larger than 8's, and if that did not suit him he could go to some other shop. I would much rather that some one else would do their work if they do not have any more sense than that.

At another time Prof. D. P. Hurlbut, the great horse trainer, came to my shop and wanted to know the size of nails I used and I told him the same, and he said he wished I had No. 4's. So you see the difference when a a man knows his business or understands the nature of the feet. It seems to be natural for some persons to want all they can get for their money, and I think sometimes that is the reason they want large nails. In St. John, Kansas, in 1887, a man that had charge of a livery stable came to my shop and wanted a horse shod and stated that they never had any shoes put on the horses, but what they had to be pulled off because the horses became lame. He said he would try me and if the horses did not get lame he would bring others, I told him if I could not shoe his horses without their getting lame I did not want his trade. I asked him to bring the one that was the most lame; he said he had the worst case with him; I shod him and after that he brought the balance of his horses and he never had a lame horse while I shod them.

In 1874 while working for Mr. Wm. Cook in Lincoln, Neb., a man brought a trotting mare in to the shop and told Mr. Cook, the proprietor, that she was still lame

and was getting worse instead of better. Cook sai' he had done all he knew for her and would give up as he did not know what ailed her, and he claimed to be the best horseshoer in the city,or state. He was a Canadian and they as a rule do not like to give up to any person as knowing any more than they do themselves. So he asked me to come and see the foot and tell him what was the trouble in case I knew, I told him that all the trouble was her feet were contracted. He said he did not believe it. The owner wanted to know if I could help her any by shoeing, I told him I could; so he told me to try her. I did so and told him to come back in three weeks, which he did and was well pleased and in three months she was all right.

I have made the foot of the horse a study and how best to shoe them that would be a benefit to them, instead of an injury, as is generally the case. Whenever I could find a man that knew, or claimed to know, anything about the foot or how to shoe a horse I was always willing to learn and ready to pay for their knowledge, and by getting a little here and a little there I by experimenting and noticing the result, I have been successful beyond all expectation. When I commenced the business I said I would master the business of cureing lameness in horses' feet, and now I am not ashamed to go before the public and let my work show for itself. I have made it a rule for years when a man brought a horse to my shop to be shod that I would do a good job and for the benefit of the horse and if a boy came he got just as good a job as any person, and if some man came with a horse and said that he wanted the shoes put on just so and I knew that it was wrong or an injury to the horse I would not do it and if I could not

convince him that it would not do I would tell him I would rather he would go to some other shop and have the work done.

There are too many smiths, as well as horse owners, that do not care anything about the feelings of the poor horse, only so it answers the purpose of the present and they get their money. One cause of poor shoeing is the fault of men who bring a horse to the shop with a lot of old shoes and it may be one good shoe in the lot and no two alike, too large or too small, and holes too large to make the largest nail fill them and want the smith to put them on and if the smith objects or tells him that the shoes will not do, he will insist on having them put on and say: "Oh! I only want them on for a few days, and then I will have them taken off." They have a load or two to pull, or a trip to make, and then as a rule the smith puts them on and nine times out of ten the shoes will stay on until worn out, or the horse gets lame, and then the smith gets a cursing for doing a poor job. Besides some one will ask who done that job and the man will always tell who, but always fails to say it was done as he ordered it done. So you see that the smith gets the blame when the owner should have it. I would much rather a man of that kind would go to some other shop for his work, as it would be money in my pocket; and when a man brings me a lot of old shoes that are not good enough and will not let me put on new ones, I will give him a better shoe than the ones he brought and throw his shoes in the scrap pile. A man in Topeka, Kansas, brought a horse to me to have shod. The horse was contracted in both feet and the worst kind of corns, and he wanted me to put the shoes on as

he wanted them. He wanted them about an inch wider at the heels than the foot, and of course I had to object and he said he would not have it done any other way. I told him to go to some other shop as I would not do it that way, as I always fit the foot and would do it no other way. Finally he agreed to have it done my way, but if the horse went lame I would have to take them off and put them on his way. I told him I would not put them on his way but would return his money; but he has not yet come back for it, but has had the shoes reset and said I could shoe him to suit myself. No man who owns a horse but who ought to know enough about a horse's foot to know just how much ought to be taken off when shod. But very few horses want any of the sole taken off—only the dead sole or growth of the foot when the shoe is left on some time.

I do not want to be understood that all horseshoers as a class, are ignorant or careless about how they do their work, but I do say, as I have said before, that impropper shoeing is the primary cause of nearly all the lameness in the feet, and more than that, nearly all the lameness in the limbs. I want to be understood when I say there is no such thing as a horse being stoved in the shoulder, as a great many smiths as well as horsemen say, for the reason that every one of that kind can be benefited by shoeing. I will stake my reputation as a shoer that I can take the worst case of the kind that can be found and will guarantee to give relief at once and do nothing only work on the feet. But when a horseshoer and one having a premium on a case of shoes, as a horseshoer would say, to a man who understands his business, that it does not make a d—n bit of difference how a shoe is put on the foot, just so the

owner will take care of the feet. Why not say that it makes no difference what kind of a boot you wear, if you take care of your feet, they will not hurt you!

There are a great many men in the business who do not know how to shoe a horse, because they never had a chance to learn, the men with whom they were apprenticed could not learn them anything, except to nail on shoes and possibly make them stay on a long time to the injury of the foot. As long as a shoe will stay on and the horse does not go lame, it is allright. Then there are some who will listen to every man who brings a horse to the shop and says he wants his horse shod "just so." Of course, if the smith does not fully understand how the job ought to be done he will put the shoes on so the horse will after a while go lame, and then the horse is either sprained or something else wrong, but the shoe is never thought of as being the cause. There are many men who follow the business who never served an apprenticeship only long enough to learn to drive nails, calk a shoe and put it on, and are often employed because they will work cheap. There are other reasons why such work is done and to the determent of the good, honest workman, who can and will do a good job. The man who works cheap will get the work of a great many men and who will say: "I got my horses shod at such a place and only cost a dollar or a dollar and a quarter," as the case may be, "and it is a good job because the shoes stick". Cheap workmen as a rule, are nearly all poor workmen. A man should charge enough so that he can afford to do a good job, or not do it at all. Then there are men who can command good wages and a good job, because

they can turn out lots of work and yet they cannot tell a contracted foot when they see it. Then there is another cause for poor shoeing. Some one will spend months of time on a case of shoes to take to the fair, have them ground and polished and plated, and the men who are judges—not knowing a good job when they see it—give him a premium. The truth is he cannot shoe a horse on correct principles to save him! Yet he will get the work regardless of the number of horses he ruins, and when they become lame say he is either lame in the shoulder, or chest, foundered, or something of that kind. I want it understood that there are a large majority of horse-killers, called veterinary surgeons, when called to see a lame horse, will say that there is something wrong in the shoulder and will either blister the hair off, or will tell you to go to some certain horseshoer and get a concaved shoe put on. Just as well cut his tail off for a sore eye. I have had dozens of just such cases, where some would-be veterinary surgeon had failed, after making the horse lame in the shoulder by blistering, I would take the horse and dress his feet as they should be and then in a short time the horse would begin to improve.

Some men cut, carve and burn a horse's foot as if there was no more feeling in it than there is in a block of wood. They neither regard the feelings of the horse nor the injury they do the owner, and do not care as long as they get their pay. May God speed the time when all such persons will either have to learn enough to pass an examination on the subject of horse-shoeing and nature of the horse's foot, or be compelled to quit

the business. I would like to see the day soon come when all the legistatures of the states will pass such laws. I have lived and followed the business of horse shoing in five different states and all kinds of climates, hot and cold, wet and dry, and in all conditions of roads and pavements, dry, sandy, wet, loam, hilly and rocky, cobble stone, asphalt and modern pavements, as well as limestone turnpikes, and know that it is no use to say that the pavements or the roads does this or that.

I would much rather have a horse lame from going bare-foot than from being shod. A little rest will cure one, but not the other. When a man undertakes to start a shop, he should understand his business and no man who owns a horse should let any man shoe him except an honorable smith, who will do just the same for a boy as he would do for a man.

Corns. Their Cause and Cure.

There is no disease so common in horses' feet as corns. At least three-fourths of the lameness in the feet are caused by them.

CAUSES.

There are several different causes for corns.

First:—By the shoe being too short and bedding in at the angle of the heel and bruising the sole.

Second:—By the shoe being too wide at the heels and having too much bearing on the quarters.

Third:—By having the shoe uneven and too much weight on the heels.

Fourth:—By the feet being contracted.

HOW TO DISTINGUISH THEM.

First:—By the horse resting his feet in front of him and throwing the weight on his toes.

Second:—By tenderness at the heel.

Third:—By removing the shoe and pareing the foot and in the angle made by the uniting of the wall of the hoof and the bar of the foot will be noticed a dark red spot. But if caused by contraction it may not show for sometime.

Fourth:—By the horse getting lame and by fever in the part; also by the wearing of the shoe mostly at the toe and when traveling does not let the heels come down on the ground.

Neglected corns are a constant source of trouble to he horse, and are very apt to fester and cause a quittor. Almost every day the writer has a case of corns that have festered and have to be treated.

WHAT TO DO.

Take off the shoe and pare out the corn thoroughly I sometimes have to make a hole two inches deep by one inch in circumference. Do not be afraid to get it all out. Then if it has been very sore use some of the nerve and bone linement while you fit the shoe. If the horse has to be put to work at once, which is generally the case, if you can use a bar-shoe do so; but be sure whatever kind of a shoe, whether a bar or plane shoe, keep the bearing off the heels not by bending the shoe but by pareing the heel down so the weight will not come on the corn. When your shoe is ready fill the cavity of the corn with the healing salve, and if necessary take a hot iron and melt it so it will fill every crevice in the heel. Put some cotton over it to

keep out the dirt, then apply the shoe but do not draw the shoe tight on the corn. Three nails on that side are sufficient. Sometimes it will be necessary to poultice to take the fever out of the feet, but a good way is to stand the feet in a tub of water and if warm so much the better. Do not let the shoes stay on over three or four weeks and be careful about letting the shoe rest on the heels. Apply the hoof ointment twice a week, and have the shoes fit so that they will follow the heels around to the frog Do not be afraid of hurting the frog by the shoes bearing against it as a great many people are; bevel the shoes out from the nail holes back to the heels to prevent contraction. If you can use it, a bar-shoe is always best for corns, but always use a wide shoe at the heels, that is a wide web, so it will cover the heel and bar both. If the smith, or owner of the horse, will follow the directions laid down he will have no trouble with corns on his animals' feet. Always keep the feet soft.

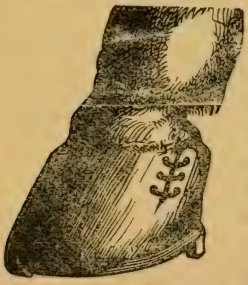
Quarter Crack,

Quarter cracks are a split or crack in the hoof, usually on the inside quarter, but sometimes on both and extending down the hoof from the top, and sometimes from top to bottom in a straight line, but sometimes cross-wise of the foot. When through the hoof to the quick it causes much lameness.

CAUSES.

Generally speaking, poor shoeing is the most prolific cause of quarter cracks, and of many other diseases of the foot; having the shoe throw all the weight on

the quarter; contraction of the feet; the feet getting dry and hard and by using hot shoes to fit with, thereby drying up the foot and preventing the natural secretive functions of the feet to distribute the propper nutrition to the hoof. The hoof is porus and the secretions ooze out and keep it healthy and glossy, but when improperly shod by burning and rasping the enamel of the hoof it soon assumes a dry, hard and dead appearance and is liable to quarter and toe crack. It is sometimes caused by the horse being driven over rough and uneven roads and pavements while the hoof is dry and hard.



CLOSING A HOOF CRACK
By the use of thin wire.

WHAT TO DO.

The best way to cure a quarter crack, and it only is a question of time, is to use a bar shoe and do not let the weight of the shoe rest from the quarter crack back to the heels; then take a sharp knife and cut across the foot above the crack about three-fourths of an inch and far enough above the crack so it will not start again. Cut in the hair until it bleeds, use the nerve and bone liniment a few times around the cornet and the hoof ointment freely; but first get the foot soft by poulticing or soaking in warm water which will also allay the fever. Sometimes it will be necessary to close the crack by boring smal holes, putting small copper wire to keep it to its place and prevent spreading. Careful shoeing and attention will be all that is needed. If necessary the horse can be used every day with no inconvenience. I have cured numbers of quarter cracks and the animal in continuous use.

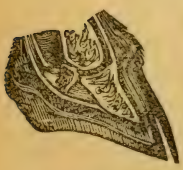
Toe or Sand Crack.

SAND CRACK.

Pared away at the sides and bottom, to remove bearing also method of shoeing with clips to support sides of crack.

Are caused by dryness or brittleness of the hoof and are in the front part of the foot and will have to be treated same as quarter cracks, except that in fitting the foot for the shoe, care must be taken that the part of the foot where the crack is must not bear on the shoe. Clean out the crack and put wires through it and put two clips on the shoe one at each side of the crack. Cut across the top, use our nerve and bone liniment and the hoof ointment. Whenever the shoe gets loose, be very careful about having the shoe reset at once.

Seedy Toe.



SEEDY TOE.

Showing the separation of the wall from the soft parts underneath.

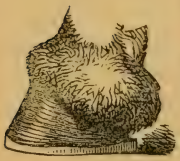
Is caused by putting clips on the shoes and burying them in and pounding them back in the foot, bruising the toe and causing a seperation of the horn and lamanie or the two layers of the horn that form the wall or crust of the foot.

CURE.

Pare the wall down so that it will not rest on the shoe. Clean out the crevice, fill it with healing ointment or tar, and use the nerve and

bone liniment on the coronet to get up healthy actions and use a hoof ointment freely. To prevent seedy toe do not use clips on the shoe and, if you do, do not burn them in or pound them into the foot; but take the knife and cut a place for them.

Quittor.



A QUITTOR.

In active suppuration, before the pus has broken out at the top.

Quittor is the name of a disease of the foot when the festering of any sore, works up through the hoof and breaks out at the top next to the hair.

CAUSES.

Greatly neglected and festered corns, gravel getting in the foot and a prick of a nail.

HOW TO DISTINGUISH IT.

Quittor usually appears on the quarters and at the heels, but most generally on the inner quarter over the seat of a corn. After the horse has been lame some time the swelling appears at the coronet. In some horses the swelling is large and in a few days breaks and then matter is discharged. This relieves the horse to some extent. Sometimes the pain is so great that the animal will not put the foot on the ground. If neglected in a short time pipes will form, pointing downward in every direction, having a common center at the top. The foot becomes enlarged and out of its natural shape. It is very difficult to cure unless taken in time.

TREATMENT.

A QUITTOR.

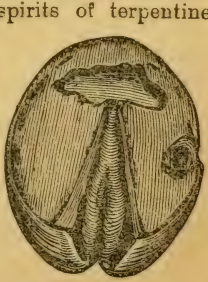
After it has broken out at the top.

First open at the top, then poultice the foot until it is soft, then open from the bottom to connect with the opening at the top. Use the nerve and bone linement freely a few times, afterwards apply the healing salve and fill all the parts with it, even if you have to use a hot iron to melt it in and wash with castile soap.

PRICK.

Prick, from nails or nail wounds, may becaused by driving nails in the quick when shoeing, and by picking up nails in the road, or by stepping on a board containing nails.

Having had a great deal of experience in this line, having treated hundreds of such wounds I will say I have never known one that ever give me much trouble if taken in time. As soon as I find there has been a nail in the foot I take my knife and cut around the wound until every thing in the way of blood or matter formed can escape. Then I either use spirits of terpentine freely or the nerve and bone liniment for a day or two. I then fill the space with the "healing ointment" run it in hot but always keep cotton on the hole, or something to keep the dirt out. If the horse cannot rest, I run rosin over the cotton to be certain that no dirt or gravel gets into the hole, but open it every day.



THE SOLE OF A FOOT.

Showing nail wound and and how to pare it out.

You can rest assured that if you do that there will be no

trouble. Sometimes it will be necessary to poultice the foot to take the fever out. It is always best to do so if possiable.

Laminitis or Founder.

This disease is of two kinds, acute and chronic. In acute laminitis the feet are very much fevered, the horse being in much pain does not like to move in any direction, especially backward, rests the most of his weight on the hind feet. Sometimes the front feet give him so much pain that he will not stand on them but lies down. You may always distinguish it by trying to back the horse. He will sway his body back without moving his feet.

FOOT WITH A WEAK SOLE. Predisposed to founder and pumiced foot.

There are several causes for this trouble, over work and over feed, hard driving, and getting the horse hot and then letting him cool off in a draught, drinking cold water when hot, or, may originate from some other disease, and settle in the feet, they being the weakest part of the horse, or it may be caused by bad shoeing, causing the feet to become inflamed. Right here I will state that to my certain knowledge at least three horses in this city of Topeka, that I have treated have been caused by the same shoer. One of them where I commenced treatment would not stand on his feet to eat. He was turned out to grass and would lie down and eat grass. When brought to me I tol dthe owner I would cure him for ten dollars or no pay. I commenced on him the 25th of June 1887, and to this date Aug. 16th 1889, he has not been lame after the first three weeks and is used every day on the pavment. I refer you to S. A.

Steans and Howard Pierce. flour and feed dealers 1006 Kansas Avenue, North Topeka.

When inflamation sets in the leaves or lamina separate sometimes, and usually in chronic laminitis a sunken place in the front part of the hoof, the toe inclined to turn up and on pareing the foot you will find that there is at the toe a black. rough and dead space between the wall and sole. The separation continues up the front part of the hoof, quite a distance, while the heels grow fast and incline forward bringing them well under the foot, causing the horse to walk mostly on the heels. The bottom of the foot soon tends to drop down causing what is known as pumice foot. If not attended in time, it is almost always past cure, very few cases ever getting well.

CHRONIC LIMINITIS

Will be known by the clumsiness of the horse especially of the feet. The chest sunken and as some say chest founder, where the trouble is all in the foot. He will rest his feet on the heels and rings or ridges will form around the feet. Good shoeing and by keeping the feet well pared and use the nerve and bone linement around the coronet, and hoof ointment freely, will relieve the horse a great deal. In the case of S. A. Stears' horse I blistered freely with the liniment, used the hoof ointment and a bar-shoe for a while.

In acute or chronic laminites it is best to first poultice the feet before shoeing, but when first taken pare the feet close until they bleed at the toe, then use either hot bath or put on bandages and apply hot water freely. If taken in time there will be no trouble in effecting a cure.

Pumiced Foot.

Careful shoeing with concave shoe, and getting a healthy action of the feet by poulticing and ointment and blister around the coronet is about all that can be done for the animal,

Thrush.

Is a disease of the frog, and is caused by filth and by leaving shoes on too long, and not keeping the feet cleaned out. The frog will rot and sometimes come out, and is very offensive. All that is needed is to wash the foot clean every day and use the "healing ointment. Keep the feet clean and you will never hear of thrush.

But in treating any unhealthy or diseases of the foot keep the horse's system in good, healthy condition, as the cure will depend a great deal on the blood being in a healthy condition. Give salts, sulpher, ginger and rosin, the three last in equal proportions, keep your stable clean and well ventilated. Just look to the welfare of your horses, to keep him healthy as you would yourself.

Contracted Feet.

A contracted foot may be caused by the horse hurting his foot or leg, and not useing the foot, which will let the muscles of the legs and the foot shrink; but the usual causes of contraction are the evils arising from improper shoeing, such as you can find in almost any town. Shoeing wide at the heels with the shoes beveled in, all the way back to the heels, with the shoes crossing the quarters instead of following the wall around to the heels, cannot do anything else but con-

tract the foot, and cause corns, etc. Another cause is throwing the weight all on the heels and toe; drawing the quarters down with the nails, bruising the heels causing them to fever and get dry and hard, the frog dries up and then the first thing you know your horse's feet begin to curl in at the heels, and any kind of shoeing that will tend to bind the foot at the heels will surely contract it. The high, strong heeled foot is the most easily contracted, but a flat foot once contracted is harder to cure.

WHAT TO DO.

Take your horse to the smith that will do the shoeing as laid down here, if he does not understand the veterinary part of his work, have him remove the shoes, but always have the clinches cut. Then have the feet pared down well at the toe. Open the heels well and if you can possiably spare the horse awhile (better hire one in his place,) poultice his feet with the bran and lye poultice, flax-seed meal or anything to soften the foot. Then have a bar-shoe put on, the shoe bearing strong on the frog; be sure to not let it rest on the heels and only use three nails on a side, next the toe. Use the hoof ointment freely, two to three times a week, and reset the shoes in three or four weeks If you cannot use a bar shoe let the shoe follow the heels to the frog. Do not have the shoe too long, and bevel the shoe out from the nail holes back to the heels, good, strong bevel, and fit the heels the shape of the shoe, but do not let it rest hard on the heels. A good shoer can prevent the feet from contracting and also cure it, but a bungler never. Leaving the shoes on too long will tend to contract the feet. If your horse is lame from contracted feet use the nerve and bone liniment around the corronet and above,

as it will relieve the soreness of the navicular joint. It is the duty of every man that shoes a horse as well the owner to fully understand the principles of proper shoeing, and treatment of the horse's feet. As the time has come when no man ought to drive a nail in a foot without taking a course of instruction on the science and art of the treatment of the feet, and also on the structure of the foot, there is no excuse for not understanding the business thoroughly, except that of gain without giving an equivalent.

Nevicular Diseaes.

The principle cause is sprain of the tendons that pass between the frog and navicular bone. By a bad case of contraction, or anything that will cause the joint to become fevered and remaining so. The trouble will affect the horse so that he will be resting first one foot in front of him and then the other. His gait is short and clumsy, stumbles and wears the shoe off at the toe.

Treat the feet the same as for contracted feet, but shoe with the heels of the shoe half an inch higher than the toe. If taken in time it is no trouble to effect a cure.

Garvel.

Gravel is the result of a gravel or some other hard substance getting in the foot, generally between the wall and the sole where they unite, or at the heel in the corn, or any hole in the foot. Pare the foot down and after finding the place cut around it and remove it, and apply the liniment or turpentine for a day or two, then use the healing ointment. Gravel if neglected will make the horse very lame and will work up through the foot and form quittor.

Bruises of the Sole.

Caused by treading on a stone in traveling. Find where the soreness is and open it, and use either the liniment or turpentine a day or two; then fill the hole with hot salve and you will have no more trouble with it.

Calks.

Are no trouble if you will put the healing ointment on and it will take the soreness out, but they will have to have time to grow out. Be careful when near the bottom of the hoof that they do not cause the hoof to split and cause either toe or quarter crack. Better keep the horse shod.

Side Bones.

Is the hardening or ossification of the lateral cartilages or gristle that extends from the wings of the coffin bone to above the quarters. When the feet are sound they are soft, but when ossified, or become side bone, are very hard and are easily felt with the hand, above the quarters. All the way you can do to relieve the horse is to make the feet spread out at the heels, and as well at the top around the quarters by shoeing as for contracted feet, and blistering the sides where the bones are, frequently. Keep the foot soft and use the hoof ointment freely.

Side bones are caused by bruises or by contraction, or the result of navicular disease, or by getting the foot fast and hurting the quarters and inflamation setting in. A good way to allay pain in the feet is to stand them in a tub of warm water.

Interfering.

Is, as a rule, the faulty action of the horse in handling his feet and sometimes the fault of the smith. If a horse interferes first find out the part of the foot he strikes with and then let the shoe set a little under the foot at that place, and leave the nail out at the part he strikes. Rasp the clinches close and round off the foot a little next to the shoe leaving it over the shoe. It requires a good deal of judgement sometimes to stop a horse from interfering. Sometimes it requires a side weight with the heavy weight inside. I never have known a side weight shoe, properly set with the weight on the inside, to fail and I have used lots of them, although most men use the weight on the outside. The worst interfering horse I ever saw was a mare at St. John Kansas, owned by Fred. Smith, and she cut both her front legs from her knees to her pastern joint. I used the side weight on the inside and effected a permanent cure.

FORGING.

Also requires a great deal of judgement. Sometimes it is necessary to make them spread out their hind feet, with side weights. I use side weight shoes sometim on inside and sometimes in the outside, paring the toe of the front feet down pretty well and the heels of the hind feet, leaving the toe of the shoe on the hind foot to set back of the toe and do not rasp it off You will have to be guided a great deal by the horse. On a roadster use a heavy shoe in front, and very light behind. By careful driving and noticing how the horse handles his feet, will depend a great deal, in fact it is half in the driver.

Hot Fitting.

I denounce the practice of hot fitting, or in other words to heat a shoe red hot and press it down on the foot, and burn it in until the smoke fills the shop, as some do. In the first place it is injurious to the foot for it dries up the foot, and deadens the shell or wall of the hoof, and stops the natural flow of the secretions of the foot, by closing the pores of the hoof; you will always find a foot of that kind brittle and dead. I have shod horses in all kinds of climates, wet and dry, and never yet have I found it necessary to burn a foot in order to dress it; the smiths say it will not hurt the foot or the horse, but there are only two reasons why they fit with a hot shoe, one is the foot cuts easier and they can bed the shoe down so as to have an equal bearing all around, saving time to the injury of the horse. The second is the smith cannot fit a shoe level and dress the the foot level to receive the shoe and so you see he says hot fitting is the best, regardless of the injury he does the foot or the damage he does the owner. I denounce hot fitting as the twin relic of barbarism.

Scratches or Grease.

Is a sure sign of neglect of the owner or driver by not keeping the legs and feet clean. The cavity above the hoof is furnished with a large number of secreting and excreting glands, and when the horse is in good health these glands or vessles keep the parts soft and lubricates the external portion and preserves them against friction, irration and disease, while the system is relieved of impure matter. Anything to check this or cause it to become irritated will have a tendency to

inflame and cause it to become sore. If taken in time no trouble to cure. I have known and cured cases with only washing with good castile soap and bathing in salt water. If kept clean, and use the healing ointment they will soon have it cured. When of long standing they are troublesome to cure and will take some time; but it is dangerous to get any of the matter on your hand, and you had better be careful. Give condition powders to get the system in good condition. Keep the stable clean and well ventilated and with good care they will heal allright.

Cracked heels may be treated the same as grease or scratches.

TO WELD CAST STEEL.

To weld cast steel take one pound of borax, pulverize, and take one oz. each of carbonate of iron and sal-ammoniac, mixed well together. A better way is to melt the borax and sal-ammoniac together and when dry pulverize and mix in the iron. There is no better compound made for welding steel.

To restore burnt steel: When you find your steel is burnt, don't hit it with the hammer but plunge in cold water and cool it, heat again and work it; and it as good as ever. To case-harden iron or steel, heat to a cherry-red and roll in prussiate of potash: heat again and cool off.

TO TEMPER MILL PICKS.

Salt-peter and Alum each 2 z., Sal-ammoniac $\frac{1}{2}$oz., Salt 1$\frac{1}{2}$lbs., Soft water 3 gals. Heat to a cherry-red and cool.

Recipes.

HOOF OINTMENTS.

No. 1.

Neats-foot oil - 1 pint.
Oil Oraganum - 4oz.
Oil Tar - - 6 "
Turpentine - - 6 "

A number one! It acts as a liniment on the foot.

No. 2.

Neats foot oil, Fish oil and Turpentine equal parts. Is a good hoof ointment and keeps the foot soft.

No. 3.

3 lbs. lard, one pint pine tar and one pint turpentine. Very good.

No. 4.

1 gal. crude petroleum, 1 pint oil tar, ½ pint oraganum, and 1 pint turpentine. Is first-class to soften the hoof and take the soreness out.

I have used all of the above hoof ointments, and know that they are good and all of them but one are my own perscription. Use them in all diseases of the feet such as quarter and toe crack, contracted feet, navicular lameness, &c. &c.

BLUE OINTMENT.

Rosin 4oz., Verdigres ½oz., Turpentine 2oz., Mutton tallow 2lbs, Oil oraganum ½oz., Tinct. iodine ½oz., mix well. Good for scratches, fistula, cuts, etc.

WHITE OINTMENT.

For sprains, bruises, swellings, etc. Fresh but-

ter 2lbs., Tinct. iodine ½oz., Oraganum 2oz., mix well use at night rubbing in well.

A good ointment is: Turpentine and lard, for flesh cuts or bruises. Or carbolic acid and water is good for cuts. I have cured bad cuts on horses with this alone. I used the latter to cure nasal gleet in a mare and did cure her after a few applications. Put a fine sponge on a slender stick 14 inches long and put up the nose.

THE SUN CHOLERA CURE.

This remedy I have used myself for ten years in my family, and know of a great many who used it with success. It will cure colic, cholera morbus, cramp or pain in the stomach, or bowels in five minutes either in man or horse. Is worth its weight in gold. Take equal parts of tincture of opium, capsicum, rheubarb, essence of pepermint, spirits of camphor; 15 to 30 drops for man every 20 to 30 minutes until relieved, and to horse 9 times as much.

COLIC.

Asafœtida lump large as thumb disolved in warm water will never fail to cure colic.

MIXTURE FOR COLIC.

Sweet spirits nitre 1½oz., Tincture opium 1oz, Extract ginger ½oz. Mix and give as one dose in one-half pint of water.

FOR COLIC.

Perry Davis' Pain Killer, 25c bottle at one dose. I knew it to cure a valuable stallion when

led out to die, and given up by four good Veterinarys. And one dose done the work and cured him.

REMEDY FOR HEAVES.

Take arsenic just what will lay on the point of a pen-knife and give in feed two to three times a week.

COLDS IN HORSES.

Give tar and burn tar under their nose, put sack over nose to make them breath all the smoke possible and give the condition powders: rosin, ginger, sulpher and gentian equal parts; mix and give tablespoonful in feed twice a day. This is better than any you buy and does not cost half as much.

WATTS' NERVE AND BONE LINIMENT.

This liniment cannot be equaled for all kinds of sprains in horses or man, rheumatism, lame back, navicular lameness in horses, etc. It will blister a horse in a few minutes.

GREEN MOUNTAIN SALVE.

Rosin 5lbs, Burgundy pitch, Bees-wax, and Mutton tallow each one-fourth of a pound; Oil of hemlock, Balsam of fir, Oil of oraganum, Oil red cedar,and Venice turpentine each 1oz.; Oil worm-wood one-half oz., Verdigris finely pulverized one oz. Melt the first articles together and then add the oils; having mixed the verdigris with the oils, stir well and pour in cold water and work as wax. A very fine salve.

In a great many cases of foot diseases or where the

system is deranged it will be necessary to give either condition powders or tonic powder, and you should always bear in mind that the blood should be cleansed if not in healthy condition. Salts is about as good for the blood as you can get given in small doses; for the general system the condition powers are good, and sometimes you will want a tonic powder or mixture.

TONIC POWDERS.

Sulphate of iron 1½oz, Nitrate of potash 1oz., Fenugreek seed ½oz., Gentian 1oz., Capsicum 2 drams, Linseed meal 4oz. Mix and give a tablespoonful night and morning.

TONIC MIXTURE.

Tincture of iron 1oz., Tincture of Gentain 1oz, Water 10oz. Mix well and give two tablespoonsful three time a day.

WATTS' VETERINARY HEALING OINTMENT.

Will cure all kinds of sores, barb-wire cuts, burns, bruises, swellings on either animal or human flesh, corns on horse or man, boils or any skin disease, piles, erysipelas, grease scratches, thrush, etc. Either of the liniment or ointment, always kept on hand at my shop and sold in 25c, 50c, and one dollar bottles or box, or the two together. Send and get 25c samples of each, post paid. Can furnish plenty of testimonals to the good of the above.

TESTIMONIALS.

This certifies that J. E. Watts commenced shoeing a mule for me, about harvest, that was so badly contracted that she could not be used on the road. I never had any

man shoe her that could do the mule any good. But now, since Mr. Watts has shod her and treated her feet, she travels allright.

A. Ingram,
Dec. 24th, 1888. Grantville, Kas.

This is to certify that I had a very lame horse. I took him to J. E. Watts and he found that corns had festered. He opened them well and put in his healing ointment and put on the shoes and the horse has not been lame since. He has shod the horse three times.

Geo. W. Smith,
Sept. 26th, 1889. Topeka, Kas.

I take pleasure in recommending Mr. J. E. Watts, Veterinarian and Farrier of North Topeka, to any one having a horse afflicted with lameness. My horse had been quite lame in both front feet for about two years when Mr. Watts began treatment, and a perceptable improvement followed his first shoeing. After six months treatment with no loss of the use of my horse her feet seemed to be in perfect condition and all lameness gone.

H. S. Reecing,
Feb. 25th, 1889. Topeka, Kas.

Mr. J. E. Watts has shod my horse for about one year, and when he began shoeing the horse she had corns in both fore feet and they were also contracted, and interfered with her hind feet, all of which disappeared on account of his treatment and shoeing.

Oct. 1st, 1889. W. M. Pattee,
Topeka, Kas.

This is to certify that we have a horse that had a bad quarter crack, and none of the blacksmiths ever helped it until Mr. J. E. Watts, veterinary horseshoer, commenced on him, and he has completely cured the quarter

crack, as also stopped lameness on another horse that had corns and contracted feet.

Anderson & Son,
Coal Dealers, Topeka, Kas.

I bought a horse that had a quarter crack of long standing and took him to J. E. Watts, who has performed a perfect cure and the feet are allright. Also stopped lameness on a horse that had corns. Never lost the use of horses a day in the time.

E. L. Ball,
Expressman, Topeka, Kas.

To whom it may concern: This will certify that my carriage horse was affected with soft corns and at times quite lame. Since having him shod by Mr. Watts he has shown no signs of lameness. I believe him to be permanently cured. I. W. Pack,
North Topeka, Kansas.

I have used Watt's Veterinary Healing Oinment on my horse, that got hurt in a run away and it proved entirely satisfactory in every respect. I. F. Berry,
North Topeka, Kansas.

I want to say that J. E. Watts has cured a horse of contracted feet for me. I used the horse all the time. This will certify that I have cured a horse of sore neck with J. E. Watts' Veterinary Healing Ointment that had been sore two years; also one of my horses bit the other clear through the lip and the Ointment cured it in a few days. W. T. Craig,
North Topeka, Kansas.

WATTS'
Nerve - and - Bone - Liniment
FOR MAN OR BEAST

Has no equal for Sprains or Bruises, Lame Back, Rheumatism of Muscles or Joints in Man, and Swelling in Throat or Legs, Laminitis or Navicular Disease in Horses. Try it and be convinced.. Put up in 25c, 50c and $1 sizes. If your dealer does not keep it address the manufacturer. Prepared only by J. E. Watts,

No. 1020 Kansas Ave. North Topeka Kansas.

WATT'S
Veterinary Healing Ointment

Is a remedy that no horseman or stock-raiser should be without, as it is a sure cure for all kinds of old sores, such as

Fistula, Pole Evil, Boils, Shoe Boils,
Harness or Saddle Galls,
All kinds of Barbed Wire Cuts, Sore Throat or Mouth,
Lymphatitis, Swelling of the Legs,
Thrush, Foot Rot, Scratches, Grease Heels,
Mange, Contracted Feet or Corns in Horses.

FOR MAN

It is unsurpassed in the cure of Cuts, Burns, Bruises, Boils Salt Rheum, Eczema, Tetter, Itch, Erysipelas, Piles, Corns, and all kinds of skin diseases. Put up in 25c 50c and $1 packages. Prepared by J. E. Watts,

No. 1020 Kansas Avenue. North Topeka, Kansas

SANTA ENG. K. C.

LIBRARY OF CONGRES
0 002 863 799 8